

CLAIMS:

Having thus described the invention, what is claimed and desired to be secured by Letters Patent is:

1. A method of providing a graphic display of an electrical distribution network to provide network personnel insight into network operations comprising:

monitoring a segment of the network to obtain information about a predetermined performance characteristic within the segment;

processing the information to ascertain relative performance characteristic values within different portions of the segment; and,

displaying the results of the processing in a graphic format which allows an observer to readily ascertain what is occurring at respective portions within the segment and determine whether operations within the network segment are acceptable, and if not, where a problem is occurring, and the magnitude of the problem.

2. The method of claim 1 in which displaying the information includes a three-dimensional display in which one axis represents locations within the network segment, a second axis a representative value of the performance characteristic, and the third axis periods of time.

3. The method of claim 1 in which displaying the information includes a three-dimensional display in which one axis represents locations within the network segment, a second axis a representative value of the performance characteristic, and the third axis service paths within the network segment.

4. The method of claim 2 in which the display comprises a terrain map including both current and historical information about the network, the terrain map being used to monitor and improve the quality of service within the network.

5. The method of claim 3 further including a plurality of displays each of which comprises a terrain map including information about the network at a given point in time, the terrain maps being used to monitor and improve the quality of service within the network.

6. The method of claim 5 in which the terrain maps are arranged in a loop of maps and the method further includes a user traversing through the loop to obtain information about the quality of network performance over time.

7. The method of claim 1 in which monitoring a segment of the network includes counting customer complaints regarding problems within areas of the network segment.

8. The method of claim 1 in which the monitoring further includes counting the occurrences of power outages within the network segment.

9. The method of claim 8 in which the monitoring further includes measuring line voltages at the respective locations within the network.

10. The method of 9 including using a two-way network communications system to obtain the information about the network segment.

11. The method of claim 1 further including providing a separate graphic display of multiple segments of the electrical distribution network.

12. The method of claim 10 further including combining the information used to produce the separate graphic displays to produce a graphic display for the entire network.

13. The method of claim 1 in which the information comprises a color coded, three dimensional display to facilitate understanding the information presented.

14. The method of claim 13 further including providing symbols to identify particular types of incidents which occurred at particular locations and/or particular times to facilitate interpreting the display.

15. The method of claim 13 further including rotating the display about any axis of the display to allow a viewer to readily view particular features on the terrain map.

16. The method of claim 13 in which the display is transmissible from one location to another by an electronic medium so the information can be displayed at more than one viewing location.

17. The method of claim 13 further including electronically storing the information used to produce the display.

18. The method of claim 13 further including periodically updating the display to include information for another predetermined period of time.

19. A method of providing a graphic display of an electrical distribution network to provide network personnel insight as to network operation comprising:

monitoring a plurality of network segments to obtain information about predetermined types of incidents occurring within each respective segment;

processing the information to ascertain where within each segment incidents occurred and the number of incidents which occur over a predetermined period of time; and,

displaying the combined results in a graphic format which includes the number of incidents occurring within each network segment, each location within the segment where they occurred, and the number of incidents which occurred at that location during previous periods of time.

20. The method of claim 19 in which displaying the information includes a three-dimensional display in which one axis represents locations within the network segment, a second axis the number of incidents which occurred, and the third axis periods of time

21. The method of claim 19 in which displaying the information includes a three-dimensional display in which one axis represents locations within the network segment, a second axis the number of incidents which occurred, and the third axis service paths within the network segment.

22. The method of claim 20 in which the display comprises a terrain map including both current and historical information about the network, the terrain map being used to monitor and improve the quality of service within the network.

23. The method of claim 21 further including a plurality of displays each of which comprises a terrain map including information about the network at a given point in time, the terrain maps being used to monitor and improve the quality of service within the network.

24. The method of claim 23 in which the terrain maps are arranged in a loop of maps and the method further includes a user traversing through the loop to obtain information about the quality of network performance.

25. The method of claim 19 further including color coding the display to make it easier to understand the information presented.

26. The method of claim 25 further including providing symbols to identify particular types of incidents which occurred at particular locations and/or particular times to make it easier to interpret the display.

27. The method of claim 25 further including rotating the display about any axis so a user can more readily view particular features on the terrain map.